

What I claim is:

1. A medico-surgical instrument for ventilation via the trachea comprising: a hollow needle having a sharp tip adapted to penetrate the trachea through neck tissue; an elongate inner member located within said needle such that the member can slide along its length relative to the needle; a resilient member adapted to urge said inner member forwardly relative to said needle, such that a forward end of said inner member is located forwardly of said needle tip before use but is displaced rearwardly during passage through neck tissue by engagement with the tissue and moves forwardly relative to said needle when said trachea is penetrated; and an indicator towards a rear end of said needle for indicating position of said elongate member relative to said needle so that the user knows that the trachea has been penetrated.
2. An instrument according to Claim 1 including a tracheostomy tube extending along an outside of said needle so that said needle can be removed to leave the tracheostomy tube in the trachea after penetration of the trachea.
3. An instrument according to Claim 2 including a dilator with a tapered patient end mounted on said needle, and wherein said tracheostomy tube is mounted on an outside of the dilator with the tapered end of the dilator projecting from a patient end of said tracheostomy tube.
4. An instrument according to Claim 2, wherein said tracheostomy tube is helically reinforced.

5. An instrument according to Claim 2, wherein said tracheostomy tube is cuffed.
6. An instrument according to Claim 1, wherein said inner member is hollow and provides a gas passage along said member.
7. An instrument according to Claim 6, wherein said inner member is closed at its patient end and opens through a side opening adjacent the patient end.
8. An instrument according to Claim 7, wherein said inner member opens through two side openings adjacent the patient end.
9. An instrument according to Claim 7, wherein said side opening is longitudinally elongated.
10. An instrument according to Claim 6 including a coupling towards a machine end of said inner member by which gas can be supplied to said inner member.
11. An instrument according to Claim 1, wherein said indicator means includes a visual indicator.
12. An instrument according to Claim 11, wherein said visual indicator includes a colored flag movable behind a transparent window.

13. A medico-surgical instrument for ventilation via the trachea comprising: a hollow needle having a sharp tip adapted to penetrate the trachea through neck tissue; an elongate inner member located within said needle such that the member can slide along its length relative to the needle; a spring between said needle and said inner member urging said inner member forwardly relative to said needle, such that a forward end of said inner member is located forwardly of said needle tip before use but is displaced rearwardly during passage through neck tissue by engagement with the tissue and moves forwardly relative to said needle when said trachea is penetrated; a visual indicator towards a rear end of said needle for indicating position of said elongate member relative to said needle so that the user knows that the trachea has been penetrated; a dilator mounted on said needle; and a tracheostomy tube mounted on said dilator such that a patient end of said dilator extends beyond a patient end of said tracheostomy tube and such that said dilator and tracheostomy tube can be slid off said needle when said indicator indicates that the trachea has been penetrated.

14. Apparatus for ventilating via the trachea comprising: a hollow needle having a sharp tip adapted to penetrate the trachea through neck tissue; an elongate inner member, said inner member being hollow and opening towards a patient end, said inner member being slidably mounted within said needle; a spring between said needle and said inner member urging said inner member forwardly relative to said needle, such that a forward end of said inner member is located forwardly of said needle tip before use but is displaced rearwardly during passage through neck tissue by engagement with the tissue and moves forwardly relative to said needle when the trachea is penetrated; an indicator towards a rear end of said needle for indicating position of

said elongate member relative to said needle so that the user knows that the trachea has been penetrated; and ventilation equipment connected with a rear end of said elongate inner member by which ventilation gas is supplied to the trachea via said inner member.

15. A method of ventilating a patient comprising the steps of: providing an instrument comprising a hollow needle having a sharp tip, an elongate member extending within the needle and projecting from a patient end of said needle and an indicator towards a machine end of the instrument for indicating movement of said elongate member relative to said needle; inserting a patient end of the instrument through neck tissue of a patient into the trachea until a change in the status of the indicator indicates that the trachea has been penetrated; and subsequently ventilating the patient via the instrument.
16. A method of inserting a tracheostomy tube into a patient's trachea comprising the steps of: providing said tracheostomy tube loaded on an instrument comprising a hollow needle having a sharp tip, an elongate member extending within the needle and projecting from a patient end of said needle and an indicator towards a machine end of the instrument for indicating movement of said elongate member relative to said needle; inserting a patient end of the instrument through neck tissue of a patient into the trachea until a change in the status of the indicator indicates that the trachea has been penetrated; and sliding said instrument rearwardly relative to said tracheostomy tube to remove said instrument and to position said tracheostomy tube in the trachea.

17. A method according to Claim 16, wherein said tracheostomy tube is loaded on a dilator on said instrument and the method includes the step of advancing said dilator forwardly along said instrument to advance said tracheostomy tube into the trachea, and subsequently removing said dilator to leave said tracheostomy tube in position.